



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D3628-1
Job Sheet 177246



Part No: D3628-1

Job Qty: 250 ea

Part Name: Washer, Cupped



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 5/8/18

Job Tracking No:

Due Date: 6/6/18

Created By: Chantal Lavoie

Type: Stock

Description:

Note: DWG REV C IPP Rev:A New Issue 07-05-28 JLM IPP Rev:B Removed Powder 07-07-11 JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	250 pcs		6/6/18	0.00	0.00	Purchasing		AT 18/06/22
110	Packaging	250 pcs		6/6/18	0.00	0.00	Packaging2		AT 18/06/22
120	QC	250 pcs		6/6/18	0.00	0.00	QC6		38
130	Packaging	250 pcs		6/6/18	0.00	0.00	Packaging3-1		9-39
140	QC21-SA	250 Ea		6/6/18	0.00	0.00	QC21		JUN 28 2018

Part Op 100 - Issue P/O: 39857 Email or Ship DXF file to vendor Laser Cut D3628-1 flat pattern and form as per DWG 21 JUN 28 2018
Descriptions: D3628 Possible Supplier: GFI
110 - Ensure material certification is attached

MAY 10 2018

X 250

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D3628-1P	Cupped Washer	250 pcs (1 ea)	100-Purchasing	50P3325

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	D3628-1P	250	0	0

Part Specifications

Specifications could not be found.

Plex 5/8/18 3:14 PM dart.lavoie.chantal



Container No: S083327



Part: D3628-1

Job No: 177246

Serial No/Batch: S083327

Revision:

Inspector:

Exp Date:

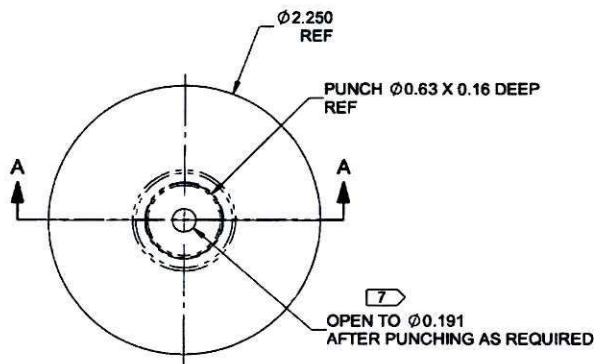
Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

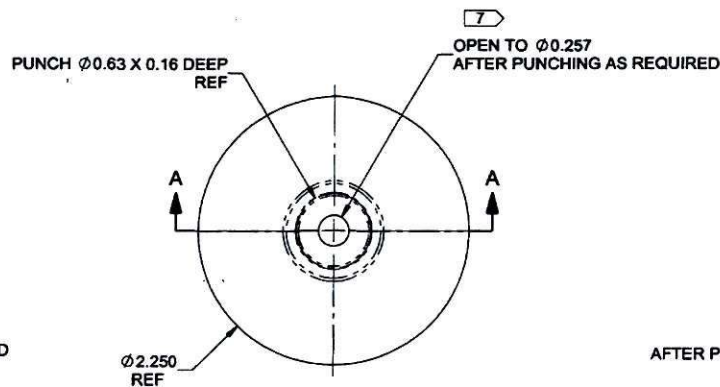
Date: 06/22/16

3/10
8C
95-B
34C
FS
10-9

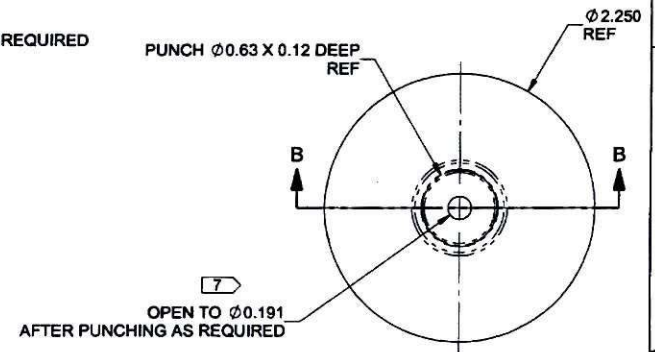
4250



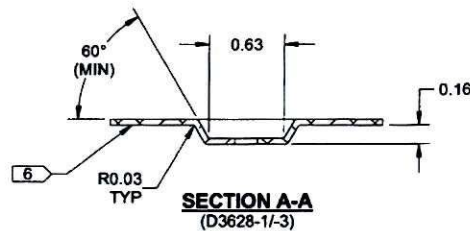
D3628-1 CUPPED WASHER



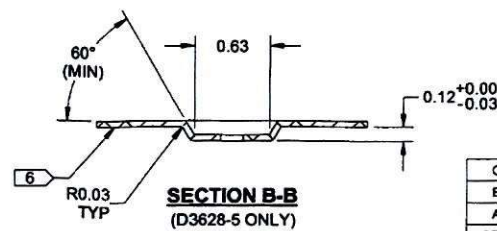
D3628-3 CUPPED WASHER



D3628-5 CUPPED WASHER



SECTION A-A
(D3628-1/-3)



SECTION B-B
(D3628-5 ONLY)

NOTES:

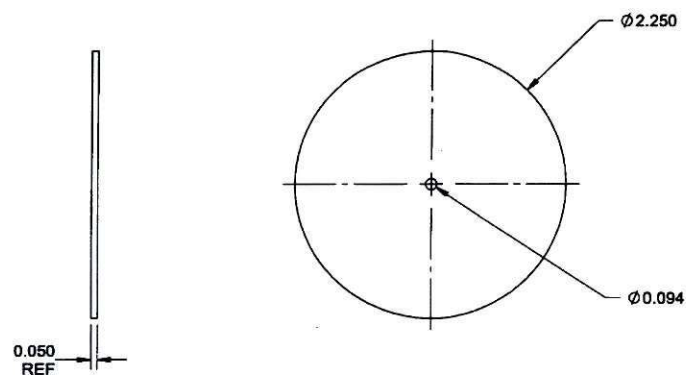
- 1) MATERIAL: MADE FROM D3628-1F
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.5
- 7) WHEN DRILLING OUT THE CENTRE HOLE AFTER PUNCHING, ENSURE THAT THE HOLE IS DRILLED CONCENTRIC TO THE CUPPED AREA, WITHIN 0.03
- 8) WEIGHT: 0.02 lbs

RELEASE
R 2012-05-07

C	UPDATE DWG TO CURRENT STD; ADD -5, ZN C1-1	DC	12.04.19
B	REMOVE POWDER COAT	CB	07.07.09
A	NEW ISSUE	CB	07.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DC		
DRAWN	DC		
CHECKED	BE		
MFG. APPR.	BE		
APPROVED	NO		
DE APPR.	HA		
DATE	12.04.19		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3628	REV. C
TITLE CUPPED WASHER	SHEET 1 OF 2
	SCALE NTS

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D3628-1F FLAT PATTERN

RELEASED
2012-05-07
WPD

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 18 GAUGE (0.050 THICK)
ANNEALED, 2B FINISH
PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs

DESIGN	DC	DART AEROSPACE LTD	
DRAWN	DC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	BE	DRAWING NO.	REV. C
MFG. APPR.	BE	D3628	SHEET 2 OF 2
APPROVED	10	TITLE	SCALE
DE APPR.	14	CUPPED WASHER	NTS
DATE	12.04.19	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMBOD OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO039857

Supplier: GFI001-VC
GFI
180 Avenue Labrosse
Pointe Claire
QC
H9R 1A1 Canada
Phone: 514 630 4877
Fax: 514 630 4849

PO No: PO039857

PO Date: 5/10/18

Due Date: 6/11/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: COD

Freight Terms:

Special Comments:

REVISED

Items

Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	D4735-1P			Scuff Plate as per dwg d4735 rev. a	Firmed	6/28/18	10 pcs	0 pcs 10x	10 pcs	\$126.00/pcs	\$1,260.00
Line Item Note w/o 177247											
2	D3628-1P			Cupped Washer As Per Dwg D3628 Rev. C	Firmed	6/28/18	250 pcs	0 pcs 250x	250 pcs	\$2.72/pcs	\$680.00
Line Item Note wo 177246											
Grand Total:											\$1,940.00

Order Notes

ccg & MT 18/12/12

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Plex 5/11/18 7:37 AM dart.lavoie.chantal



180 AVENUE LABROSSE
POINTE-CLAIRE, QC, CANADA H9R 1A1
TÉL.:(514) 630-4877 - FAX:(514) 630-4849

C'est une division de Thomas & Betts Limitée / GFI is a division of Thomas & Betts Limited



BON DE LIVRAISON /SHIPPING MEMO

DATE DE LIVRAISON / SHIPPING DATE			N° DE BON DE LIVRAISON / SHIPPING MEMO NO.	PAGE
JR - DY	MO - MO	AN - YR		
18	06	18	0623420	1/1



NDU À /SOLD TO

EXPÉDIÉ À /SHIP TO

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

CODE DE CLIENT / CUSTOMER CODE	N° DE CONTRAT / JOB NO.	VOTRE N° DE COMMANDE / YOUR PURCHASE ORDER NO.	EXPÉDIÉ PAR / SHIP VIA
DART GFI-0299	0350701	PO039857	

QUANTITÉ / QUANTITY	N° DE PIÈCE / PART NO.	DESCRIPTION
250	D3628-1P	CUPPED WASHER ITEM 2 C OF C REQ'D
MFG. JOB# <u>0350701-001</u> QTY <u>250</u> pcs DUE DATE: <u>22 June 2018</u> 		

DAS
38
9-89

EXPÉDITEUR
SHIPPER

REÇU PAR /RECEIVED BY

DATE

TOUTES LES RÉCLAMATIONS DOIVENT ÊTRE FAITES EN DEDANS DE 5 JOURS DE LA RÉCEPTION.
ALL CLAIMS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF GOODS.

CERTIFICATE OF COMPLIANCE CERTIFICAT DE CONFORMITE



Membre de / A Member of **Thomas & Betts**

180 LABROSSE AVENUE
POINTE CLAIRE, QC
H9R 1A1

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7

CERTIFICATE NO. 22 OUR JOB NO 0350701-001 SHIPPING MEMO 0623420

ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME	DWG ISSUE
<u>2</u>	<u>250 PCS</u>	<u>PO039857</u>	<u>D3628-1P</u>	<u>C</u>	<u>CUPPED WASHER</u>	<u>C</u>
MATERIAL		SUPPLIED BY			MAT. REL. NO.	
<u>AMS 5513 304 ANN</u>		<u>TW METALS / NORTH AMERICAN STAINLESS</u>			<u>H/N 243D</u>	

	PROCESS	PROCESSOR	RELEASE NOTE #
1	<u>FIRST ARTICLE INSPECTION REPORT ON FILE</u>	<u>GFI</u>	<u>N/A</u>
2	<u>REF. GFI MANUFACTURING JOB NUMBER 0350701-001 (250 PCS)</u>		
3			
4			
5			
6			
7			
8			
9			

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE 18 JUNE 2018

G.F.I. Q.C. REP. *Stanton H...*



DAS
38
9-89



TW METALS
O'Neal High-Performance
Metals Group

CERTIFICATIONS

FRAUD AND FALSIFICATION STATEMENT

The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under statutes including federal law. Title 18 chapter 47.

CERTIFICATE OF COMPLIANCE

This certificate of compliance certifies that the material supplied on the purchase order number below complies in all respects with the material description and procurement specifications.

MERCURY FREE STATEMENT

TW Metals certifies that the supplies furnished under this contract contain no metallic mercury or mercury compounds, and have not come in contact with mercury or alpha bearing instruments while in the possession of TW Metals Inc.

Customer Name: GFI, Inc

Purchase Order No.: 0089751

Item number: 002

Shipper/Invoice No.: 1210772

Material: 304

Manufacturing Mill: NAS

Specification: Ams 5513

Heat / Lot No. 243D

Size: 050

Quantity: 1pc

Signature: Janice Clark

Date: 8/12/17

DAS
38
9-89

United Performance Metals

Paul Isaacs
Paul Isaacs
Quality Associate

Customer Name: TW Metals - NY

Customer PO: D12017938

UPM Sales Order: 640254

Date: 17/08/2017

Description/Form: STAINLESS 304L - SHEET

Heat Number: 243D

Ingot: 09243D AB

Width: 48.0000 Length: 120.0000

Size: .0500

Customer P/N:

Packing List Number: 35489-1

Quantity: 80 lb. 1 pc.



NORTH AMERICAN
STAINLESS

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 254485 03
Mail To:
UNITED PERFORMANCE METALS
3475 STOKES ROAD
HAMILTON, OH 45015

Customer: 0018 001

Ship To:
UNITED PERFORMANCE METALS
3475 STOKES ROAD
HAMILTON, OH 45015

Date: 1/12/2017 Page: 1

Steel: 302/304/304L

Finish: 2B

Your Order: CIN-25524-PO5

NAS Order: AN 0736195 01

Corrosion: ASTM A262/15; 1808end-OT

PRODUCT DESCRIPTION:

S/S COIL, C.R. ANNEALED & PICKLED; UNS 30400/30403/30200
ASTM A240/15b, A480/15, A666/15; ASME SA240/15, SA480/15, SA666/15
CHEM ONLY ON FOLLOWING ASTM: A276/15, A479/15, A484/15, A312/16
CHEM ONLY ON FOLLOWING ASME: SA312/13, SA479/13
AMS 5511H/5513J/5516P EXX; MIL-S-5059D AND D3 (X CRN HEAS); MIL-4043B
NACE MR0175/ISO 15156-3:2009 A, MR0103/07; QQS766D-A X MAG FERM
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED
FHX 304L/304/302; AMS 5511H

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1; RoES 1 & 2 Compliant
Material is Free of Radioactive Contamination
Steel Making Process: EAF, AOD, & Cont. Casting
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001
Melted & Manufactured in the USA; Mat'l is DPMs Compliant

Product ID #	Coil #	Thickness	Width	Weight	-----Length-----	Mark	Pieces	COMMODITY CODE
09243D AB	* 09243D AB	.0500	48.0000	16,690	COIL	2254.5	1	1 00624

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

CHEMICAL ANALYSIS CW(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Chemical Analysis per ASTM A751/14a

HEAT	CM	C %	CR %	CU %	HN %	MO %	N %	NI %	P %	S %
243D	US	.0210	18.1300	.3845	1.7890	.2795	.0785	8.0100	.0290	.0011
SI %										
.2835										

MECHANICAL PROPERTIES

Product ID #	Coil #	1 d o i c z	UTS KSI	20C .2% YS KSI	20C ELONG 1-2"	% Hard RB	Tail Hard	Grain No.	D Per F.N.
09243D AB	09243D AB	P T	97.89	51.57	47.86	88.00	86.00	8.00	3.08

UPMOC
Review/Approved
Spec: ALL

Ex: MW Date: 1/13-17
Pages: 1

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

KRIS LARK 1/13/2017





Pratt & Whitney Canada

Une société de United Technologies / A United Technologies Company

Pratt & Whitney Canada Cie. /
Pratt & Whitney Canada Corp.
1000, Marie-Victorin
Longueuil, Québec, Canada
J4G 1A1
450-677-9411

Bon de commande Purchase Order

COPIE - COPY

Page 1 De 4
No. 4503098236
Date 2017.12.28

P&WC JR3-6804-E (2012-10)

QST 100 1620165 TQ 0005MF - GST R104287008

Information générale - General Information

THOMAS & BETTS LIMITED
180 LABROSSE AVENUE
POINTE CLAIRE QC H9R 1A1
CANADA

Approved by Mirko Manjak on 04/17/2018

Attention: MIRKO MANJAK

Expédié à - Deliver To

Pratt & Whitney Canada
c/o Transport Robert (15F)
11850 Rue Irénée Vachon
MIRABEL QC J7N 3L2
CANADA

Les achats Purchasing Organization

Personne-ressource de P&WC
P&WC Contact Person

Product Procurement

M Dugas
450-677-9411

Votre n° de fourn. avec P&WC
Your Vendor No. With Us

4272

Notre référence (parafe)
Our Reference (initials)

Votre référence (parafe)
Your Reference (initials)

Votre numéro de devis
Your Quotation No.

Date de votre devis
Your Quotation Dated

Valide dès
Valid From

Jusqu'à
Valid To

Devise
Currency

CAD

Modalités de paiement - Terms of Payment

dans les 30 jours sans déduction

Modalités de livraison - Terms of Delivery

FCA L'EXPÉDITEUR

349411

Nota - Note(s)

Le fournisseur doit rencontrer toutes les normes et spécifications de P&WC, incluant sans restreindre la généralité de ce qui précède, la spécification CPW40. Ces normes et spécifications peuvent être mises à jour par P&WC en tout temps.

Les instructions d'emballage sont disponibles sur le site web interactif pour fournisseurs de PWC (<https://eportal.pwc.ca>).

Supplier shall comply with all P&WC standards and specifications, including but not limited to CPW40, as such standards and specifications may be updated by P&WC from time to time.

Packaging instructions are available on P&WC's Supplier's interactive web site (<https://eportal.pwc.ca>).

Le fournisseur doit rencontrer toutes les normes et spécifications de P&WC incluant, sans restreindre la généralité de ce qui précède, la spécification CPW40. Ces normes et spécifications peuvent être mises à jour par P&WC en tout temps.

Les instructions d'emballage sont disponibles sur le site web interactif pour les fournisseurs de P&WC (<https://portal.pwc.ca>)

SQOP 01-01 (Exigences générales) s'appliquent à ce bon de commande

Ce Bon de Commande ou Calendrier Convenu est aussi régi par tous autres termes et conditions convenus et en vigueur entre P&WC et le fournisseur pour les produits et/ou services couverts par les présentes. En l'absence de tels termes ou conditions, seules les présentes seront applicables.

- Le Programme de Représentants Délégués de la Qualité (PW SCOP-DQR) s'applique à ce bon de commande

Signature d'autorisation de P&WC
P&WC Authorization Signature

M Dugas

Date 2018.02.08 08:59:32



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO039857

Supplier: GFI001-VC
GFI
180 Avenue Labrosse
Pointe Claire
QC
H9R 1A1 Canada
Phone: 514 630 4877
Fax: 514 630 4849

PO No: PO039857
PO Date: 5/10/18
Due Date: ~~5/11/18~~ 06/28/2018
Purchase Order Revision:
Revision Date:
Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: COD
Freight Terms:
Special Comments:

Items

Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	D4735-1P			Scuff Plate as per dwg d4735 rev. a	Firmed	05/11/18 06/22/2018	10 pcs	0 pcs	10 pcs	\$126.00/pcs	\$1,260.00
Line Item Note w/o 177247											
2	D3628-1P			Cupped Washer As Per Dwg D3628 Rev. C	Firmed	05/11/18 06/22/2018	250 pcs	0 pcs	250 pcs	\$2.41/pcs 2.72	\$604.00
Line Item Note wo 177246											
Grand Total:											\$1,864.00

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

- A005 RIGHT OF ENTRY
- A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER. (DOCUMENTATION MAINTAINED BY SUPPLIER)
- A012 CHEMICAL AND PHYSICAL TEST REPORTS
- A016 PERSONNEL QUALIFICATION
- A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
- A026 CERTIFICATION OF MATERIAL CONFORMANCE
- A041 QUALITY MANAGEMENT SYSTEM
- A042 DART NOTIFICATION BY SUPPLIER
- A043 RETENTION OF QUALITY DOCUMENT
- A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
- A049 SUPPLIER AWARENESS

Plex 5/10/18 11:33 AM dart.lavoie.chantal

APPROVED

By Pedro at 3:53 pm, May 10, 2018